

Claim Listing:

1. *(Cancelled)*
2. *(Cancelled)*
3. *(Cancelled)*
4. *(Cancelled)*
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16. *(Cancelled)*
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19. *(Cancelled)*

20. *(Cancelled)*

21. *(Cancelled)*

22. *(Currently Amended)* A method of replacing, on a vertebral body, all or a portion of a natural facet joint using the a prosthesis ~~defined in claim 1~~ to provide improved support for the spinal column, the method comprising the steps of:

(i) removing all or a portion of a natural articular process from the vertebral body, and

(ii) fixing the prosthesis ~~as defined in claim 1~~ to the vertebral body to replace the removed portion of the natural articular process with the artificial facet joint structure, the prosthesis comprising a prosthesis body accommodating fixation to the vertebral body at or near a pedicle and without support by a lamina, and an artificial facet joint structure carried by the prosthesis body adapted and configured to replace all or a portion of a natural facet joint.

23. *(Original)* A method according to claim 22 further including a step of removing at least some of the lamina from the vertebral body.

24. *(Original)* A method according to claim 22 further including a step of removing at least part of a pedicle from the vertebral body.

25. *(NEW)* A method according to claim 22 further including the step of removing the prosthesis from the vertebral body.

26. *(NEW)* A method according to claim 25 further including the step of inserting a second prosthesis to replace the removed prosthesis.

27. (NEW) A method according to claim 22 wherein the natural articular process comprises a superior natural articular process of the vertebral body.

28. (NEW) A method according to claim 27 wherein the step of fixing the prosthesis is performed prior to removing or cutting the natural articular process.

29. (NEW) A method according to claim 22 wherein the natural articular process comprises an inferior natural articular process of the vertebral body.

30. (NEW) A method according to claim 29 wherein the step of fixing the prosthesis is performed prior to removing or cutting the natural articular process.

31. (NEW) A method according to claim 22 wherein the method of replacing all or a portion of a natural facet joint corrects one or more spinal conditions resulting from a degenerative spine disease.

32. (NEW) A method according to claim 22 the method of replacing all or a portion of a natural facet joint corrects one or more spinal conditions resulting from a spine disease selected from the spine diseases comprising spondylolisthesis, spinal stenosis, scoliosis, kyphosis, and kyphoscoliosis.

33. (NEW) A method according to claim 22 wherein the method further comprises the step of selecting a prosthesis sized and configured to desirably alter the biomechanics of the treated level of the spine.

34. (NEW) A method according to claim 22 wherein the method further comprises the step of creating an opening in the vertebral body.

35. (NEW) A method according to claim 34 wherein the method further comprises the step of introducing a material into the opening created in the vertebral body, the material selected from a group of materials comprising bone cement, hydroxyapatite and bone adhesive.

36. (NEW) A method according to claim 35 wherein the step of filling the opening created in the vertebral body is performed until the opening is completely filled.

37. (NEW) A method according to claim 22 wherein the vertebral body is fortified.

38. (NEW) A method according to claim 22 wherein the vertebral body is strengthened.

39. (NEW) A method according to claim 22 wherein the method includes a step of surgically exposing a spinous process, a lamina and the natural articular process at a desired level.

40. (NEW) A method according to claim 22 wherein the steps of: (i) removing all or a portion of a natural articular process from the vertebral body, and (ii) fixing the prosthesis to the vertebral body to replace the removed portion of the natural articular process with the artificial facet joint structure are repeated.

41. (NEW) A method according to claim 40 wherein the steps are repeated at an adjacent spinal level.

42. (NEW) A method according to claim 22 wherein the method includes a step of resecting a facet joint capsule and preserving some or all of a natural function of the resected facet joint capsule.

43. (NEW) A method according to claim 42 wherein the method includes a step of opening the facet joint capsule and a step of folding the facet joint capsule back.

44. (NEW) A method according to claim 22 wherein the method includes a step of removing a part of the natural articular process while simultaneously separating the natural facet joint.

45. **(NEW)** A method according to claim 27 wherein the prosthesis is implanted prior to a step of implanting a second prosthesis in an inferior natural articular process of an adjacent vertebral body.

46. **(NEW)** A method according to claim 22 wherein the prosthesis is fixed to the vertebral body on a left or a right side of the vertebral body.

47. **(NEW)** A method according to claim 22 wherein the steps of: (i) removing all or a portion of a natural articular process from the vertebral body, and (ii) fixing the prosthesis to the vertebral body to replace the removed portion of the natural articular process with the artificial facet joint structure are performed on a vertebral body at a first spinal level wherein the first spinal level is adjacent to a previously treated spinal level.

48. **(NEW)** A method according to claim 47 wherein the previously treated spinal level was previously treated during a prior surgical procedure.

49. **(NEW)** A method according to claim 47 wherein the previously treated spinal level comprises a spinal level implanted with a facet replacement prosthesis.

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